Ten years after conducting an inaugural study to establish a baseline for grizzly bear populations, researchers at the Foothills Research Institute (FRI) in Hinton are at it again.

And while most of the research will provide a snapshot of how populations in the Yellowhead unit have changed over the past decade, one pocket of activity in Jasper National Park (JNP) south – from Hwy. 16 down – will see its first official bear population study.

"We want to know how many bears there are," said Tracy McKay, project lead for JNP south and a biologist with FRI for six years.

This part of the park wasn’t included in the initial 2004 count due to a lack of funds, but was included this time around when a unique situation occurred where Parks Canada combined with the province and private partners, including West Fraser, to support the count.

Biologist Tracy McKay has been with the grizzly bear program for six years and leads a team of four other field technicians who will conduct the count in JNP south and are part of a 15-person team for the entire Yellowhead unit, which runs from Hwy 16 south to Hwy 11 and east to the edge of grizzly bear habitat.

The JNP south study will include 45-50 bear rub trees and an additional 75 lure scent sites, all of which are set up no closer than 200 metres from an established trail. There is also signage near each site so that people know not to linger in the area too long.

"It’s just to move people through the area so they’re not increasing their exposure," said McKay during a July 3 visit to a site a couple kilometres away from the Sixth Bridge in JNP.

But not all sites in the JNP south study are accessible, with many of them involving helicopter drops, 20km backcountry treks and overnight stays in remote cabins.

All sites have already been set up and four samples will be collected at two-week intervals before sites are taken down in late July to late August. It will then take team members one month to organize and pick samples before sending them to the lab in Nelson, BC.

McKay and field technician TJ Gooliaff approach a rub tree located alongside a path. Hair samples are collected from metal barbs and bark from the tree and catalogued based on type of hair and probability that it came from a grizzly.

Field technician TJ Gooliaff inspects barbed wire for grizzly hair samples at a lure site (top) and then reloads the lure with year-old cow blood (above).

"To them it smells like something died here, so they want to come eat it, but then they get here and there’s nothing," said McKay.

The group cannot sample the entire JNP south study area, which is split into 190 separate seven by seven kilometre grids – because of accessibility challenges, time and money, so researchers must use established modelling to extrapolate the data they collect. JNP south is part of the Yellowhead unit, which is one of nine study units across the province. The data collected overall will have potential far-reaching impacts on things like hunting and industrial best practices.

"Grizzly bears are classified as a threatened species in Alberta based on the previous population estimate, and because of that there was a moratorium on the grizzly bear hunt. There’s a lot of pressure on the Alberta government to reopen that hunt so the numbers kind of dictate that," said McKay.

Forestry companies came on board because they wanted to know how their harvesting practices were affecting grizzly bears.

“They’re trying some new kind of practices in terms of road reclamation, so they’re interested in knowing distribution and movements of bears relative to those practices versus regular forestry practices,” said McKay. "That kind of information is really important because if we find there’s way more bears in this area where roads have been closed and reclaimed, versus this other area, something like that has a lot of implications for how they do business."

Sean Kinney, communications and extension program lead for FRL said that, at the end of the day, it’s project partners that drive the research.

“They have the questions, and we are working hard to give them the information and get them the answers they are looking for in order to make decisions," said Kinney. "At the end of this we aren’t saying as a result of this research you should be doing A, B, C or D – we are just saying here are the results of the research.”

The DNA testing will be done over the winter and by next spring researchers should have population estimates.